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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,423	05/24/2001	Yaron Haviv	P-3150-US	9403

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Eitan Law Group
C/O LandonIP, Inc.
Suite 450
1700 Diagonal Road
Alexandria, VA 22314

EXAMINER	
HA, LEYNNA A	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/863,423	HAVIV ET AL.	
	Examiner	Art Unit	
	LEYNNA T. HA	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending.

2. This is a Non-Final rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-5, 8-12, 15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramberg, et al. (US 6,398,105).**

As per claim 1:

Ramberg, et al. discloses a method for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

providing a communication interface to an application **[COL.6, lines 23-31]**, wherein the communication interface bypasses a substantial portion of the operating system kernel; **[COL.5, lines 49-53]**

filtering application data received from a process of said application according to a predetermined policy; and **[COL.5, lines 22-23 and col.8, lines 50-55]**

providing said filtered application data directly to communication hardware **[COL.16, lines 32-35]** by bypassing a substantial portion of the operating system kernel. **[COL.7, lines 54-60 and col.10, lines 20-30]**

The claimed bypassing a substantial portion of the operating system kernel is relative because substantial portion fails to indicate the exact type or amount or quantity that is to bypass (col.6, lines 49-53). Thus, Ramberg teaches broadly claimed bypassing a substantial portion of the operating system where the computing system uses a non-Windows operating system and uses a TCP/IP sockets interface. Ramberg discloses the communication interface such as Winsock socket's interface over TCP/IP which Winsock is an application programming interface (API) that provides TCP/IP socket interface (col.6, lines 23-31). The applications retrieves and sends data to other applications (col.6, lines 33-35 and col.7, lines 55-60) where the communication uses interfaces to send information (col.5, lines 50-51), receives data, and provide functionality for adjusting specific device attributes (col.10, lines 20-46). Therefore, the data is provided directly to communication hardware and is without the operating system kernel intervention.

As per claim 2: **See COL.5, lines 50-60;** discusses verifying the identity of said application prior to providing said filtered application data.

As per claim 3: **See COL.5, lines 50-60 and COL.15, lines 31-35;** discusses

sending at least one security token.

As per claim 4: **See and COL.15, lines 31-35;** discusses verifying the identity of a machine participating in said process prior to providing said filtered application data.

As per claim 5: **See COL.5, lines 50-60 and COL.15, lines 31-35;** discusses sending at least one security token.

As per claim 8:

Ramberg discloses method for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

providing a communication interface to an application **[COL.6, lines 23-31]**, wherein the communication interface bypasses a substantial portion of the operating system kernel; **[COL.5, lines 49-50]**

filtering application data received from a process of said application; **[COL.5, lines 22-23 and col.8, lines 50-55]**

sending an authentication request to an authentication service; **[COL.2, lines 28-30 and 60-61 and COL.15, lines 31-35]**

receiving authentication information; and **[COL.5, lines 50-60]**

providing said filtered application data directly to communication hardware **[COL.16, lines 32-35]** by bypassing a substantial portion of the operating system kernel. **[COL.7, lines 54-60 and col.10, lines 20-30]**

The claimed bypassing a substantial portion of the operating system kernel is relative because substantial portion fails to indicate the exact type or amount or

quantity that is to bypass (col.6, lines 49-53). Thus, Ramberg teaches broadly claimed bypassing a substantial portion of the operating system where the computing system uses a non-Windows operating system and uses a TCP/IP sockets interface. Ramberg discloses the communication interface such as Winsock socket's interface over TCP/IP which Winsock is an application programming interface (API) that provides TCP/IP socket interface (col.6, lines 23-31). The applications retrieves and sends data to other applications (col.6, lines 33-35 and col.7, lines 55-60) where the communication uses interfaces to send information (col.5, lines 50-51), receives data, and provide functionality for adjusting specific device attributes (col.10, lines 20-46). Therefore, the data is provided directly to communication hardware and is without the operating system kernel intervention.

As per claim 9: See COL.5, lines 50-60; discusses verifying the identity of said application prior to providing said filtered application data.

As per claim 10: See COL.5, lines 50-60 and COL.15, lines 31-35; discusses sending at least one security token.

As per claim 11: See COL.5, lines 50-60; discusses verifying the identity of a machine participating in said process prior to providing said filtered application data.

As per claim 12: See COL.5, lines 50-60 and COL.15, lines 31-35; discusses sending at least one security token.

As per claim 15:

Ramberg discloses system for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

multi-channel communication hardware; and **[COL.2, lines 13-15 and COL.7, lines 30-32]**

at least one application interface **[COL.6, lines 23-31]** and filter operative to provide filtered data from an application process **[COL.5, lines 22-23 and col.8, lines 50-55]** directly to said multi-channel communication hardware **[COL.7, lines 54-60 and col.10, lines 20-30]** by bypassing a substantial portion of the operating system kernel. **[COL.5, lines 49-53]**

The claimed bypassing a substantial portion of the operating system kernel is relative because substantial portion fails to indicate the exact type or amount or quantity that is to bypass (col.6, lines 49-53). Thus, Ramberg teaches broadly claimed bypassing a substantial portion of the operating system where the computing system uses a non-Windows operating system and uses a TCP/IP sockets interface. Ramberg discloses the communication interface such as Winsock socket's interface over TCP/IP which Winsock is an application programming interface (API) that provides TCP/IP socket interface (col.6, lines 23-31). The applications retrieves and sends data to other applications (col.6, lines 33-35 and col.7, lines 55-60) where the communication uses interfaces to send information (col.5, lines 50-51), receives data, and provide functionality for

adjusting specific device attributes (col.10, lines 20-46). Therefore, the data is provided directly to communication hardware and is without the operating system kernel intervention.

As per claim 18:

Ramberg discloses system for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

multi-channel communication hardware **[COL.2, lines 13-15 and COL.7, lines 30-32]** by bypassing a substantial portion of the operating system kernel; **[COL.5, lines 49-53]**

at least one application interface **[COL.6, lines 23-31]** and filter operative to provide filtered data from an application process **[COL.5, lines 22-23 and col.8, lines 50-55]** directly to said multi-channel communication hardware; and **[COL.2, lines 13-15 and COL.7, lines 30-32]**

at least one authentication service adapted to determine whether said application process is genuine and/or whether at least one machine participating in said application process is genuine. **[COL.7, lines 54-60 and col.10, lines 20-30]**

The claimed bypassing a substantial portion of the operating system kernel is relative because substantial portion fails to indicate the exact type or amount or quantity that is to bypass (col.6, lines 49-53). Thus, Ramberg teaches broadly claimed bypassing a substantial portion of the operating system where the computing system uses a non-Windows operating system and uses a TCP/IP

sockets interface. Ramberg discloses the communication interface such as Winsock socket's interface over TCP/IP which Winsock is an application programming interface (API) that provides TCP/IP socket interface (col.6, lines 23-31). The applications retrieves and sends data to other applications (col.6, lines 33-35 and col.7, lines 55-60) where the communication uses interfaces to send information (col.5, lines 50-51), receives data, and provide functionality for adjusting specific device attributes (col.10, lines 20-46). Therefore, the data is provided directly to communication hardware and is without the operating system kernel intervention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6-7, 13-14, 16-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramberg, et al. (US 6,398,105), and further in view of Bunton, et al. (US 6,690,757).

As per claim 6:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 7:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46**

and COL.11, lines 56-64]. However fails to discusses providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 13:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discusses providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers

[COL.2, lines 23-27]. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 14:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels

implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 16:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be

placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 17:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 19:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64].** However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 20:

Ramberg discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46**

and COL.11, lines 56-64]. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Ramberg because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100